

### **REMARKS/ARGUMENTS**

Claims 13-21 are currently pending in this application all of which are rejected. Claim 13 has been amended to more clearly recite the claimed invention. Applicants submit that the formula in claim 13 was incorrect considering that the  $-C-R^1$  part of the structure presented in claim 13 is part of the backbone of the polymer and not part of the groups bound to said backbone. Applicants amendment has corrected the formula in claim 13 by defining the salt-containing polymer as obtainable by the process recited. Support for the amendments to claim 13 can be found on page 5, line 14, through page 6, line 11 of the specification. Further, the rosin material in claim 13 has been specified as a binder material. In addition, in claim 16 the term "having salts or amine-functional groups ... at least 5 carbon atoms" in relation to the salt group-comprising polymer have been deleted. Claims 14-15, and 17-20 have been amended merely to correct typographic errors. Reconsideration and allowance of the claims is respectfully requested in view of the foregoing amendments and the following remarks.

#### **1. Claims 13-21 are rejected under 35 U.S.C. § 103(a), as allegedly being obvious.**

Claims 13-21 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Codolar et al (US Patent No 6,248,806) in view of Perichaud et al (US Patent No. 6,251,967), and Hashimoto et al (US Patent No. 5,520,910), as set forth on pages 2 and 3 of the Office Action of August 12, 2008. According to the Examiner, Codolar et al discloses self-polishing marine anti-fouling paint compositions comprising rosin or rosin equivalent(s), one or more polymeric flexibilizer component(s) and optional fibers. The rosin part of the paint may comprise ammonium or metal salts of rosin. The Examiner asserts that the non-crystalline flexibilizer components include poly(meth)acrylates. Further, according to the Examiner the paints are said to have improved mechanical properties and may comprise a biological agent that affords antifouling properties. However, according to the Examiner Codolar et al do not disclose that the polymer flexibilizers may comprise salt groups of amine or phosphine functional groups. Further, the Examiner asserts that Perichaud et al disclose antimicrobial non-crosslinked polymers which are constituted of an ester and/or amide resin to which quaternary ammonium salts are bound by a covalent bond which is potentially reactive with water. In addition, according to the Examiner Hashimoto et al an antimicrobial polymer obtained by homo- or copolymerizing a phosphonium salt type vinyl monomer, such

as 2-(methacrylic acid) ethyltri-n-octylphosphonium chloride that correspond to those of applicants' claims.

In response applicant submits that the polymer present in the coating composition of the presently invention comprises the salt of an *amine or phosphine*-functional group. The polymer in the claimed invention thus comprises a salt of a primary, secondary, and/or tertiary amine. In this regard, applicant directs the Examiner's attention to the disclosure on page 5, lines 7-9, of the specification. This salt has the formula  $[-\text{NHR}^3\text{R}^4]^+$  or  $[-\text{PHR}^3\text{R}^4]^+$ , as shown in claim 1 as originally filed. Thus, the amine or phosphine groups present on the polymer in the presently claimed invention have an N-H or P-H functionality. Such functionality is not present in a quaternary ammonium or phosphonium group.

In contrast, applicant submits that Codolar et al disclose antifouling paints that contain as biologically active agent an ammonium or phosphonium salt, i.e. *quaternary ammonium or phosphonium* salts. Similarly, Perichaud et al and Hashimoto et al disclose polymers comprising *quaternary ammonium or phosphonium* groups. However, quaternary ammonium ions are ammonium groups in which *each hydrogen* has been replaced by an alkyl or aryl group and thus have the formula  $\text{NR}_4^+$  (R being an alkyl or aryl group). For the Examiner's convenience enclosed herewith are definitions from the Merriam-Webster dictionary and one obtained from "answers.com", defining the meaning of a "quaternary ammonium compound." By analogy, quaternary phosphonium ions are phosphonium groups in which *each hydrogen* has been replaced by an alkyl or aryl group and thus have the formula  $\text{PR}_4^+$ .

Thus, applicant submits that none of the cited prior art documents discloses polymers comprising salts of amine- or phosphine-functional groups as in the claimed invention. Accordingly, the skilled artisan, upon reading the cited references, would not arrive at the claimed invention when considering the teachings in the cited references either alone or in combination.

Therefore, applicant submits that in the absence of any hint in the cited reference or in the common general knowledge pointing towards the claimed invention it cannot possibly have been obvious to a person of ordinary skill in the art. Accordingly, Applicants submit

that the claimed invention is non-obvious over Codolar et al in view of Perichaud et al and Hashimoto et al, and respectfully request withdrawal of the rejection of claims 13-21 under 35 U.S.C. § 103(a).

It is believed that claims 13-21 are now in condition for allowance, early notice of which would be appreciated. If any outstanding issues remain, the examiner is invited to telephone the undersigned at the telephone number indicated below to discuss the same.

Respectfully submitted,

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